

WHAT IS CLAIMED IS:

1. (Original) A linear window operator for opening a window having a frame and a movable sash, comprising:

a receiver housing mountable to the window frame, the housing having an opening there-through and a spring member adjacent the opening, the spring member having a rest position;

a hinge bracket mountable to the window sash, the hinge bracket having a flexible member extending therefrom so as to form a free end, the free end being formed with a receiver element; and

a push rod having a first end and a second end, the first end of the push rod being configured as an engagement member releasably engaged with the receiver element of the flexible member of the hinge bracket, the push rod being arranged in the through opening of the receiver housing so as to be slidable there through, the push rod having a detent adjacent its second end that is engageable with an engagement lip formed by an upper edge of the opening in the receiver housing, the spring member being arranged to hold the detent in engagement with the lip in the rest position so that the detent can be disengaged from the lip by compression of the spring.

2. (Original) The linear window operator as defined in claim 1, wherein the receiver of the hinge bracket includes two parallel plates that define a gap there-between.

3. (Original) The linear window operator as defined in claim 2, wherein the engagement member of the push rod has a thickness substantially equal to the gap between the parallel plates of the hinge bracket.

4. (Original) The linear window operator as defined in claim 3, wherein one of the parallel plates has a centrally arranged pivot hole, the first end of the push rod having a pivot pin that is engaged with the pivot hole so as to permit pivoting of the push rod about the pivot pin.

5. (Original) The linear window operator as defined in claim 4, wherein the other of the parallel plates has a plurality of detents and the first end of the push rod has a locating bump that is engageable with the detents of the other parallel plate so that the push rod can be located at predetermined angular positions.

6. (Original) The linear window operator as defined in claim 1, wherein the flexible member has an engagement detent configured so as to be engageable with the lip of the through opening of the receiver housing.

7. (Original) The linear window operator as defined in claim 1, wherein the hinge bracket is a unitary piece of injection-molded plastic.

8. (Original) The linear window operator as defined in claim 1, wherein the spring has a free end with a baffle that extends laterally so as to substantially close off a remaining portion of the through-opening when the push rod is in the through opening.

9. (Original) The linear window operator as defined in claim 1, wherein the spring member is a cantilever spring having a free end that engages a bottom surface of the push rod.

10. (Original) The linear window operator as defined in claim 1, wherein the receiver housing is a unitary plastic injection-molded part.

11. (Original) The linear window operator as defined in claim 4, wherein the first end of the push rod has a radiused engagement tongue that engages between the parallel plates of the hinge bracket.

12. (Original) The linear window operator as defined in claim 1, wherein the second end of the push rod is provided with a female receiver element having two parallel plates and a pivot hole through one of the plates.

13. (Original) The linear window operator as defined in claim 12, wherein the push rod is a unitary part of injection-molded plastic.

14. (Original) The linear window operator as defined in claim 12, and further comprising a finger pull member having a first, curved end configured to be engageable by a finger, and a second, male engagement end configured to engage between the parallel plates of the female receiver element of the push rod.

15. (Original) The linear window operator as defined in claim 14, wherein the finger pull is a unitary, injection-molded plastic piece.

16. (Original) The linear window operator as defined in claim 12, and further comprising an additional push rod of identical construction to the push rod, a first end of the additional push rod having a male engagement member that is engaged in the female receiver element of the second end of the push rod, the second end of the additional push rod having a detent that is engageable with the lip of the through opening in the receiver housing.

17. (Original) The linear window operator as defined in claim 16, wherein the second push rod is a unitary, injection-molded plastic part.

18. (Original) The linear window operator according to claim 1, wherein the receiver housing has a first plate member with the through-opening and a second plate member attached at an edge thereof to the first plate member so as to project perpendicularly therefrom, the spring member being integral with the second plate member.

19. (Original) The linear window operator as defined in claim 1, wherein the hinge bracket includes a base plate, the flexible portion having a curved end opposite the free end, which curved end is connected to the base plate.

20. (Original) The linear window operator as defined in claim 16, wherein the other parallel plate of the female receiver element of the push rod has pivot detents and the male engagement member at the first end of the additional push rod has a locating bump that is engageable with the pivot detents.

21. (Original) The linear window operator as defined in claim 1, wherein the surface of the receiver housing adjacent the opening has a radiused depression.